1. (Amended) A multi-format audio/video production system adapted for use with a display device, comprising:

means to receive an input signal representative of an audio/ video program in one of a plurality of display formats;

a graphics processor connected to receive the audio/video program and convert the display format of the program into an intermediate production format, the graphics processor including:

an [a standard/widescreen] interface unit operative to convert the video program in the production format into an output signal representative of a [standard/widescreen formatted] program in an output format which may be different from the format of the input program[, and

a high-definition television (HDTV) interface unit operative to convert the video program in the production format into an output signal representative of an HDTV-formatted program];

high-capacity video storage means;

an operator interface; and

a controller in operative communication with the means to receive the input signal, the graphics processor, the high-capacity video storage means and the operator interface, whereby commands entered by an operator through the interface cause the following functions to be performed:

(a) the conversion of an audio/video program into the production format,

(b) storage of a program in the production format in the high-capacity video storage means,

(c) the conversion of a program in the production format into a [standard/widescreen] program in an output format, either directly from the means to receive the input signal or from the high-capacity video storage means[, and

(d) the conversion of a program in the production format into an HDTV program, either directly from the means to receive an input signal or from the high-capacity video storage means].

2. The multi-format audio/video production system of claim 1, the graphics processor further including a film output video interface, the controller further being operative, in response to a command entered by an operator, to convert the video program in the input format into an output signal for photographic production, either directly from the means to receive the input signal or from the high-capacity video storage means.

3. The multi-format audio/video production system of claim 1, including input and output signals compatible with any of the following standard formats: RGB, YIQ, YUV, and Y/R-Y/B-Y.

4. The multi-format audio/video production system of claim 1, including input and output signals compatible with a video standard utilizing separate luminance and chrominance component video signals.

5. (Amended) The multi-format audio/video production system of claim 1, wherein the means to receive an input signal representative of a video program includes a digital video camera including:

a plurality of one or more image sensors;

an analog-to-digital converter circuit connected to the output of each image sensor to generate a digital signal representative of the sensed image; and

a digital signal processor configured to receive the digital signal from each analog-to-digital converter circuit and generate a digital video output signal in a predetermined input format for processing by [one or more of the interface units comprising] the graphics processor.

6. The multi-format audio/video production system of claim 5, wherein the digital video camera uses two charge-coupled-device image sensors, one associated with luminance, the other associated with chrominance.

7. The multi-format audio/video production system of claim 1 wherein the means to receive a video program includes a removeable high-capacity magnetic storage medium.

8. (Amended) The multi-format audio/video production system of claim 1 wherein, in the event that a change in aspect ratio results from [any of the format] a conversion[s], the controller further is operative to cause the change in aspect ratio to be visibly evident on the display device.

9. The multi-format audio/video production system of claim 1 wherein the graphics processor is operative to convert a 24 frame-per-second format input signal into a 30 frame-per-second NTSC-compatible format output signal.

10. The multi-format audio/video production system of claim 1 wherein the graphics processor is operative to convert a 24 frame-per-second format input signal into a 25 frame-per-second PAL/SECAM-compatible format output signal.

11. The multi-format audio/video production system of claim 1 wherein the graphics processor is operative to convert a 24 frame-per-second format input signal into an HDTV-compatible format output signal.

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12. The multi/format audio/video production system of claim 1, including means to receive an RGB video signal having a chrominance bandwidth and a luminance bandwidth, and wherein the HDTV interface further provides means for reducing the chrominance bandwidth of the RGB video signal without reducing its luminance bandwidth, the HDTV interface including:

three low-pass filters. one associated with each of the R, G, and B components of the RGB video signal to remove all frequency components above a specified frequency;

an RGB-to-Y matrix circuit connected to receive each of the R, G, and B components, the RGB-to-Y matrix circuit being operative to combine the signals in predetermined proportions and produce a single luminance signal, Y;

a high-pass filter connected to the output of the RGB-to-Y matrix circuit to filter the Y signal to remove all frequency components below a specified frequency;

a Y-to-RGB matrix circuit connected to the output of the high-pass filter, the Y-to-RGB matrix circuit being operative to separate the high-pass-filtered Y signal into R', G' and B' components in the same proportion as previously combined by the RGB-to-Y matrix circuit;

three mixers. each adapted to receive an R/R', G/G' and B/B' pair, respectively, each mixer being operative to mix the signals of its respective input pairs and generate R", G" and B" signals having full luminance bandwidth and reduced chrominance bandwidth.

13. The multi-format audio/video production system of claim 1, the graphics processor further including means for transferring a program into the intermediate production format to a remote location equipped with one or more of the interface units.

14. A multi-format audio/video production system forming part of a general-purpose computer platform having a user input and color display, the system comprising:

means to receive an input video program in one of a plurality of input formats;

high-capacity video storage means;

means to convert the input program into a 24 frames-per-second (fps) production format, if not already in such a format for storage within the high-capacity video storage means and for review on the color display; and

means to convert the production format into one or more of the following output formats, either directly from the input or from storage:

NTSC at 30 fps,

PAL/SECAM at 25 fps,

HDTV at 25 fps,

HDTV at 30 fps, and

film-compatible video at 24 fps.

15. The multi-format audio/video production system of claim 14 wherein the means to convert the production format into one or more of the output formats includes interpolation means to expand the number of pixels associated with the production format.

16. The multi-format audio/video production system of claim 14 wherein the means to convert the production version into one or more of the output formats includes image sequencing means to convert the 24 fps production format into a 30 fps output format.

17. The multi-format audio/video production system of claim 14 wherein the means to convert the production format into one or more of the output formats includes means to increase the frame rate from the 24 fps production format frame rate to a 25 fps output frame rate.

18. (Amended) The multi-format audio/video production system of claim 14, including output formats having the following image dimensions in pixels:
1024 x 576,
1024 x 768,
1280 [1080] x 720, and
1080 x 960.

19. The multi-format audio/video production system of claim 14 wherein the means to convert the production format into one or more of the output formats includes means to increase the frame rate from the 24 frames per second production frame to an output having a frame rate of substantially 30 frames per second.

20. (Amended) [In an enhanced personal computer having a color monitor, the] A method of producing a video program, comprising the steps of:

receiving an input video program;

converting the input video program into a production format having a predetermined frame rate and image dimension in pixels;

providing high-capacity video storage means for storing the program in the production format [in the high-capacity video storage means];

displaying the video program on the color monitor using the predetermined frame rate and image dimensions in pixels[, including cropped versions of the program, with the extent of the cropping being visually evident on the monitor];

accessing the program in the production format from the high-capacity storage means and manipulating the program to create a desired edited version of the program in an output format, including an output format having a frame rate and image dimensions in pixels different from that of the production format; and

outputting the desired edited version of the program in the output format.

21. The method of claim 20, wherein the step of manipulating the video program to create a desired edited version of the program in a final format includes using an image-sequencing technique to convert from the production format at 24 frames per second to produce an edited version of the program in a final format at 30 frames per second.

22. The method of claim 20, wherein the step of manipulating the video program to create a desired edited version of the program in a final format includes the step of interpolating to produce an edited version of the program in a final format having pixel dimensions greater than that of the production format.

23. The method of claim **20**, wherein the step of manipulating the video program to create a desired edited version of the program in a final format includes the step of increasing frame rate to produce an edited version of the program in a final format having a 25 frame-per-second rate.

24. (Amended) The method of claim 20 wherein the step of manipulating the video program to create a desired edited version of the program in an output format includes creating a program having one of the following image dimensions in pixels:

1024 x 576,
1024 x 768,
1280 [1080] x 720, and
1080 x 960.

25. The method of claim **20**, wherein the step of converting the input video program into a production format includes converting the input video program into a production format characterized in having 24 frames per second.